analystt-ai-ba-assignment

October 27, 2023

1 Overcoming Captchas While Web Scraping:

```python
[2]: import requests

     # Define the 2Captcha API endpoint and your API key
     api_url = 'http://2captcha.com/in.php'
     api_key = 'your_api_key'

     # Specify the website URL with the captcha
     url_with_captcha = 'https://example.com/captcha-page'

     # Request captcha solving
     response = requests.post(api_url, data={
         'key': api_key,
         'method': 'userrecaptcha',
         'googlekey': 'your_captcha_site_key',
         'pageurl': url_with_captcha,
         'json': 1
     })

     # Parse the response
     request_result = response.json()
     if request_result['status'] == 1:
         captcha_id = request_result['request']
         print(f'Captcha requested. ID: {captcha_id}')

         # Poll for captcha solution
         while True:
             solution_response = requests.get(f'http://2captcha.com/res.php?
     ↪key={api_key}&action=get&id={captcha_id}&json=1')
             solution_result = solution_response.json()

             if solution_result['status'] == 1:
                 captcha_solution = solution_result['request']
                 print(f'Captcha solved: {captcha_solution}')
                 break
     else:
```

```
    print('Captcha request failed.')
```

Captcha request failed.

2 Estimating LinkedIn Profile Income:

```python
import requests

company_names = ['Company1', 'Company2', 'Company3']   # Add your list of
 ↪company names

for company_name in company_names:
    # Form a search query URL
    search_url = f'https://www.linkedin.com/search/results/companies/?
 ↪keywords={company_name}'

    # Send a GET request to LinkedIn's search page
    response = requests.get(search_url)

    # Parse the HTML response and extract company links
    # You'll need to use a library like BeautifulSoup to parse HTML and extract
 ↪links
```

3 Identifying Python-Based Tech Stack in Companies

```python
import requests

search_query = 'Python developer'

response = requests.get(f'https://www.indeed.com/jobs?q={search_query}')
# Parse the HTML response and extract job listings
# Analyze job descriptions and company information to identify Python usage

# Repeat for multiple job boards and websites to compile a list of Python-using
 ↪companies.
```

4 LinkedIn Message API:

LinkedIn's messaging API is not publicly available for sending messages outside the LinkedIn platform. LinkedIn places restrictions on automated messaging to prevent misuse.

```python
[ ]:
```